



reddot winner 2023

FRAMELESS DIFFUSERS  
**TECHNICAL CATALOGUE**

# ABOUT US

The original idea makes design distinctive, the function makes it work and quality adds value

Serge Zuev



reddot winner 2023

## **We are a proud winner of a Red Dot Design Award**

The internationally-recognised Red Dot Design Awards have been held annually for over 60 years, and recognise the best global contributions to design, assessing function, aesthetics, usage and responsibility.

It is one of the world's largest design competitions. The Red Dot Label has become established internationally as one of the most sought-after marks of quality for good design.

More information on <https://www.red-dot.org>

## PRODUCING UNIQUE GYPSUM VENT DIFFUSERS

At Ventmann, we engineer and manufacture innovative, modern vent diffusers. And they all incorporate our first-of-its-kind patented gypsum composite, together with refined designs to complement a range of interiors. In our company, we like to say "air has never been so elegant." We hope that for your project, Ventmann vent diffusers will be your choice for air elegance.

## OUR PURPOSE

Each of our products is so much more than just another vent diffuser. They are minimalist interior elements that can be integrated discreetly into any interior, or used to accentuate the precise lines and rigid angles of your design.

We work hard to create, produce and supply next generation solutions to our partners and clients. We have three values that all our products meet:

- They are innovative - our diffusers are the first on the market to be made from our special gypsum composite, so they can be frameless and fit any contemporary design. Our philosophy is that modern interiors need modern vents.
- They are sustainable - gypsum is one of the most sustainable and clean materials in use. Furthermore, we follow an environmentally-friendly production process and use ecological packaging.
- They are elegant - we want our diffusers to maintain the integrity of the interior design, completely blending in with wall and ceiling surfaces.

## OUR VISION

We grow together with our partners. That is why we always ensure the highest quality standards for our products. We want our distribution partners to have full confidence when assuring their customers that Ventmann diffusers are the best choice. This commitment to partnership and quality is helping us to achieve our ambition of supplying Ventmann diffusers worldwide.

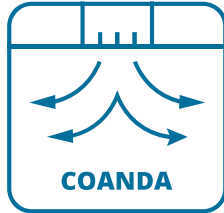
## OUR PLANS FOR GROWTH AND DEVELOPMENT

In addition to continuously developing our distribution network, we are also expanding our production capacity as demand grows. We aim to add more patented diffusers as our manufacturing capabilities expand, which will help us to further grow our partner network and ensure the Ventmann brand is a great choice for partners who want to be the first in bringing innovations to the vent diffuser market.



# PLINE





The Ventmann PERFORMANCE LINE vent diffuser combines elegant and adaptable design features with a specially engineered airflow that uses the Coanda effect, making it ideal for air conditioning. This is a model that empowers you to craft distinctive interior features or seamlessly conceal the diffusers, while minimizing direct airflow onto users.

The PERFORMANCE LINE model features all the hallmarks of a Ventmann diffuser - sustainable materials, frameless installation, the ability to paint it to match the other surfaces in the space, and design applications ranging from discrete to bold. What sets it apart from our standard LINE model is its unique shape and engineering, which harness the Coanda effect.

The Coanda effect is an aerodynamic phenomenon that causes a jet of air to be attracted to a nearby surface, efficiently diffusing the airflow. In practice, this means the current of air spreads out along the ceiling rather than being blown straight down.

This innovative vent diffuser also incorporates an interior deflector, adjustable using a simple screwdriver. This deflector enables precise control over the direction of the airflow, allowing you to direct the air at any desired angle from one side to the other. As a result, building users do not experience the discomfort of having a strong airflow directed right at them, which is especially important with air conditioning systems and when dealing with colder air. Ideal for air conditioning use, this model is also suitable for regular ventilation systems and heat recovery units.

As with all Ventmann diffusers, this is a highly flexible and adaptable unit. Our PERFORMANCE LINE vent diffuser is offered in:

- 1-slot, 2-slot, or 3-slot versions
- Standard lengths of 625mm, 1000mm, and 1250mm
- Slot width of 20mm

To see just how easy it is to install the Ventmann PERFORMANCE LINE vent diffuser, have a look at our product showcase video. And our catalogue contains all of the technical information about this model, so you can explore all of its possibilities and see how it would fit with your project.



**LINE / PLINE**



**CIRCLE / PCIRCLE**



**SQUARE**



**ART**



Installation:  
video instructions  
 **YouTube**



Download a digital  
version of the catalog  
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# PERFORMANCE LINE SERIES TECHNICAL PARAMETERS

## SUPPLY

m <sup>3</sup> /h	dim (mm)	625 1	625 2	625 3	1000 1	1000 2	1000 3	1250 1	1250 2	1250 3
	Ak (m <sup>2</sup> )	0,00708	0,0142	0,0212	0,0116	0,0232	0,0348	0,0146	0,0292	0,0438
60	X (m)	2.4	1.9							
	Pt (Pa)	1	1							
	SPLA (dB (A))	<20	<20							
80	X (m)	3.2	2.5							
	Pt (Pa)	4	2							
	SPLA (dB (A))	<20	<20							
100	X (m)	4.0	3.1	2.9	3.0	2.3	1.5	2.9	2.2	1.2
	Pt (Pa)	8	4	2	2	2	1	2	2	1
	SPLA (dB (A))	<20	<20	<20	<20	<20	<20	<20	<20	<20
160	X (m)	6.4	5.0	4.7	4.9	3.7	2.5	4.5	3.5	2.0
	Pt (Pa)	21	11	5	11	4	2	8	4	2
	SPLA (dB (A))	<20	<20	<20	<20	<20	<20	<20	<20	<20
200	X (m)	8.0	6.3	5.9	6.1	4.7	3.1	5.8	4.3	2.5
	Pt (Pa)	37	16	8	17	7	3	11	6	3
	SPLA (dB (A))	22	<20	<20	<20	<20	<20	<20	<20	<20
300	X (m)	12.0	9.4	8.8	9.1	7.0	4.6	8.7	6.5	3.7
	Pt (Pa)	80	34	16	39	16	7	26	11	6
	SPLA (dB (A))	31	<20	<20	22	<20	<20	<20	<20	<20
400	X (m)	16.0	12.5	11.8	12.2	9.3	6.2	11.6	8.6	4.9
	Pt (Pa)	145	65	27	72	27	13	46	20	10
	SPLA (dB (A))	37	25	<20	29	<20	<20	25	<20	<20
500	X (m)	20.0	15.6	14.7	15.2	11.6	7.7	14.5	10.8	6.2
	Pt (Pa)	242	110	42	112	43	21	73	32	16
	SPLA (dB (A))	42	30	23	34	22	<20	30	<20	<20
600	X (m)		18.8	17.6		14.0	9.2		12.9	7.4
	Pt (Pa)		160	61		63	30		46	22
	SPLA (dB (A))		34	27		25	<20		21	<20
700	X (m)			20.6		16.3	10.8		15.1	8.6
	Pt (Pa)			79		93	40		63	29
	SPLA (dB (A))			30		29	22		25	<20
800	X (m)						12.3			9.9
	Pt (Pa)						52			37
	SPLA (dB (A))						25			21
900	X (m)						13.8			11.1
	Pt (Pa)						63			45
	SPLA (dB (A))						27			23
1000	X (m)						15.4			12.3
	Pt (Pa)						77			55
	SPLA (dB (A))						30			26

X (m) - Throw distance (0,25 m/s)

Pt (Pa) - Pressure drop in the diffuser

SPLA (dba) - Sound pressure level at 1m distance from the diffuser

Ak (m<sup>2</sup>) - effective area

	Green	Yellow	Red
X (m)	When short throw distance is needed	When average throw distance is needed	When bigger throw distance is needed
Pa	Where low pressure drop is required	Where medium pressure drop is suitable	Where big pressure drop is suitable
SPLA	Rooms with no ambient noise (Bedroom)	Rooms with medium ambient noise (Lobby)	Rooms with ambient noise (Office room)

\* IMPORTANT: This information is for guidance only, please consult your HVAC professional for you specific requirements.

## EXHAUST

m <sup>3</sup> /h	dim (mm)	625 1 N	625 1 P	625 1 D	625 2 N	625 2 P	625 2 D	625 3 N	625 3 P	625 3 D	1000 1 N	1000 1 P	1000 1 D	1000 2 N	1000 2 P
	Ak (m <sup>2</sup> )	0,0118	0,00886	0,0071	0,0236	0,0177	0,0142	0,0354	0,0266	0,0212	0,0193	0,0146	0,0116	0,0386	0,0291
60	Pt (Pa)			2			1			2					
	SPLA (dB (A))			<20			<20			<20					
80	Pt (Pa)	1	2	6		1	4		1	3			2		
	SPLA (dB (A))	<20	<20	<20		<20	<20		<20	<20			<20		
100	Pt (Pa)	2	6	12	1	2	6		2	4		1	4	1	2
	SPLA (dB (A))	<20	<20	<20	<20	<20	<20		<20	<20		<20	<20	<20	<20
160	Pt (Pa)	11	17	39	2	4	16	2	4	9	2	6	17	2	3
	SPLA (dB (A))	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
200	Pt (Pa)	19	28	65	5	7	27	4	6	14	6	9	26	3	4
	SPLA (dB (A))	<20	<20	22	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
300	Pt (Pa)	44	61	149	12	17	63	7	9	29	15	22	59	5	7
	SPLA (dB (A))	22	27	31	<20	<20	<20	<20	<20	<20	<20	<20	22	<20	<20
400	Pt (Pa)	78	105	303	21	29	120	12	15	49	29	41	112	8	12
	SPLA (dB (A))	28	33	37	<20	21	25	<20	<20	<20	20	25	29	<20	<20
500	Pt (Pa)	123	171		33	45	190	18	23	75	44	66	165	12	18
	SPLA (dB (A))	33	38		21	26	30	<20	<20	23	25	30	34	<20	<20
600	Pt (Pa)				46	64		25	32	120	66	99		17	25
	SPLA (dB (A))				25	30		<20	23	27	29	34		<20	22
700	Pt (Pa)				64	94		34	44		89			23	35
	SPLA (dB (A))				29	34		21	26		32			20	25
800	Pt (Pa)							45							
	SPLA (dB (A))							24							
900	Pt (Pa)														
	SPLA (dB (A))														
1000	Pt (Pa)														
	SPLA (dB (A))														

m <sup>3</sup> /h	dim (mm)	1000 2 D	1000 3 N	1000 3 P	1000 3 D	1250 1 N	1250 1 P	1250 1 D	1250 2 N	1250 2 P	1250 2 D	1250 3 N	1250 3 P	1250 3 D
	Ak (m <sup>2</sup> )	0,0232	0,0579	0,0437	0,0348	0,0243	0,0202	0,0146	0,0486	0,0404	0,0292	0,0729	0,0606	0,0438
60	Pt (Pa)													
	SPLA (dB (A))													
80	Pt (Pa)	1												
	SPLA (dB (A))	<20												
100	Pt (Pa)	3		1	2		1	3			1			2
	SPLA (dB (A))	<20		<20	<20		<20	<20			<20			<20
160	Pt (Pa)	7		2	4	1	2	7			1	5		3
	SPLA (dB (A))	<20		<20	<20	<20	<20	<20			<20	<20		<20
200	Pt (Pa)	12	2	3	6	2	4	15	1	2	8			4
	SPLA (dB (A))	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20			<20
300	Pt (Pa)	25	3	5	12	7	13	35	2	4	17	2	2	8
	SPLA (dB (A))	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
400	Pt (Pa)	43	5	8	20	15	25	65	3	7	29	3	3	15
	SPLA (dB (A))	<20	<20	<20	<20	<20	<20	25	<20	<20	<20	<20	<20	<20
500	Pt (Pa)	67	7	11	31	25	40	100	5	11	46	4	5	23
	SPLA (dB (A))	22	<20	<20	<20	21	24	30	<20	<20	<20	<20	<20	<20
600	Pt (Pa)	99	10	14	45				9	18	65	5	7	32
	SPLA (dB (A))	25	<20	<20	<20				<20	<20	21	<20	<20	<20
700	Pt (Pa)	153	14	18	59				15	29	89	7	9	42
	SPLA (dB (A))	29	<20	<20	22				<20	<20	25	<20	<20	<20
800	Pt (Pa)		19	23	75							9	12	54
	SPLA (dB (A))		<20	21	25							<20	<20	21
900	Pt (Pa)		26	33								12	15	67
	SPLA (dB (A))		<20	23								<20	<20	23
1000	Pt (Pa)		33	42								16	20	82
	SPLA (dB (A))		21	26								<20	<20	26

D - with deflector    P - perforated deflector    N - no deflector

# PLINE 1/20

## PERFORMANCE



1 AMOUNT OF SLOTS      20 mm WIDTH OF SLOT

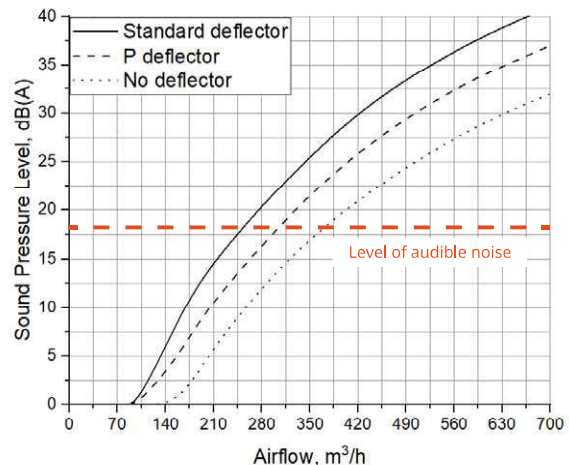
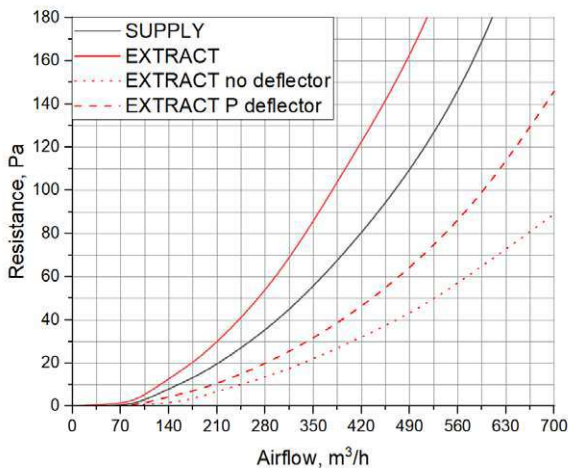
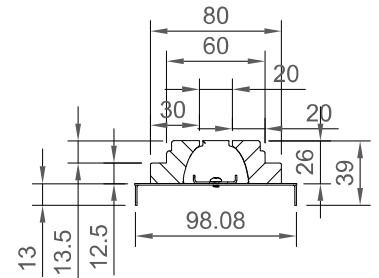
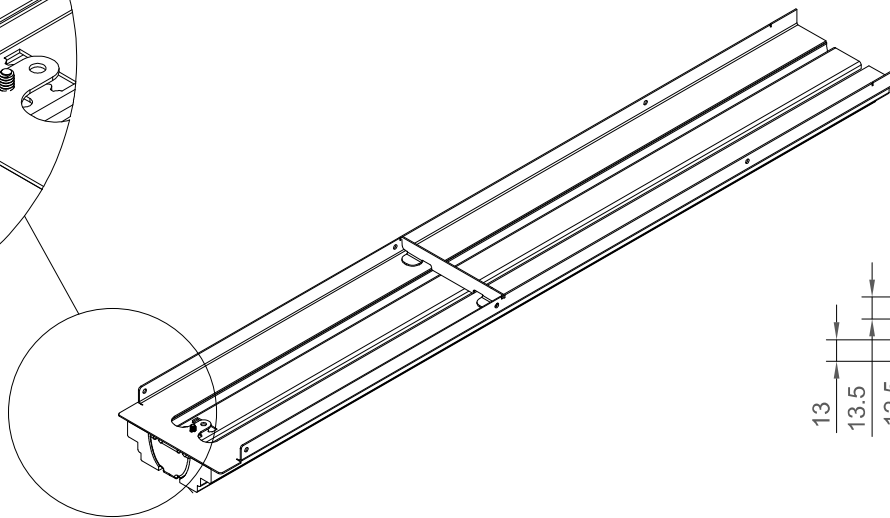
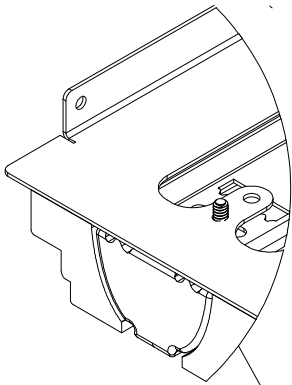
2,45 kg  
1 M. LENGTH DIFFUSER WEIGHT  
WITHOUT PACKAGING (NET)

625 / 1000 / 1250  
STANDARD SLOT LENGTH (MM)

DEFLECTOR OPTIONS:

Standart / Perforated  
/ No deflector

**A** PLENUM BOX  
WIDTH TYPE



Note: Data charts reflect measurements for the 1 m length model.



# PLINE 2/20

## PERFORMANCE



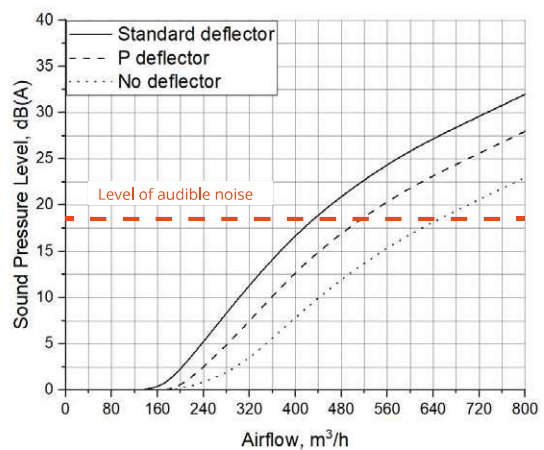
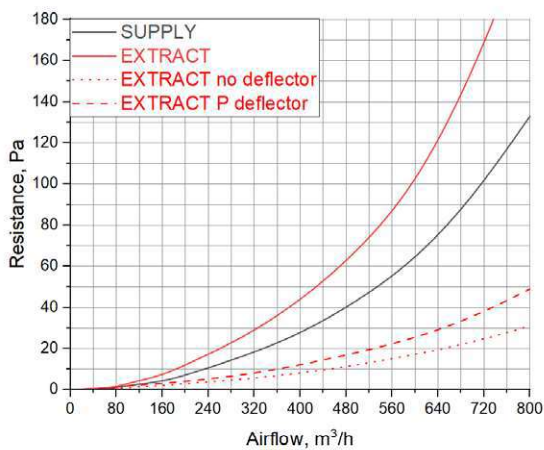
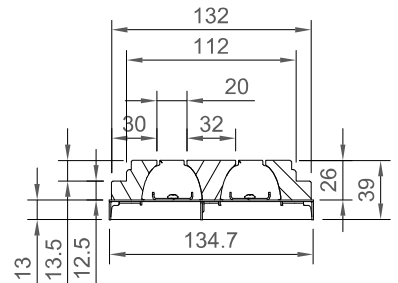
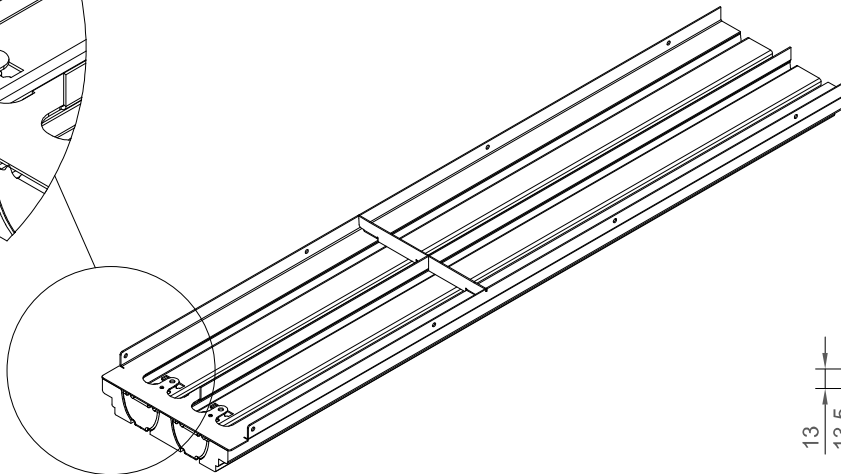
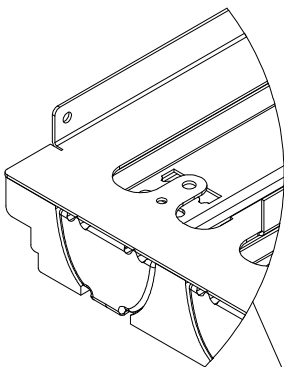
2 AMOUNT OF SLOTS      20 mm WIDTH OF SLOT

3,6 kg  
1 M. LENGTH DIFFUSER WEIGHT  
WITHOUT PACKAGING (NET)

625 / 1000 / 1250  
STANDARD SLOT LENGTH (MM)

**DEFLECTOR OPTIONS:**  
Standart / Perforated  
/ No deflector

**B** PLENUM BOX  
WIDTH TYPE



**Note:** Data charts reflect measurements for the 1 m length model.

# PLINE 3/20

## PERFORMANCE



**3**  
AMOUNT OF SLOTS

**20 mm**  
WIDTH OF SLOT

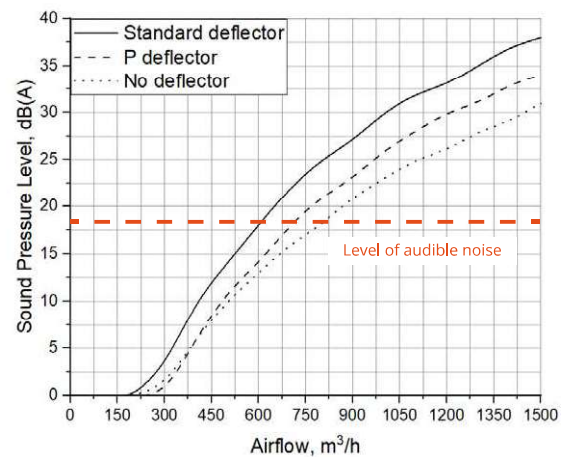
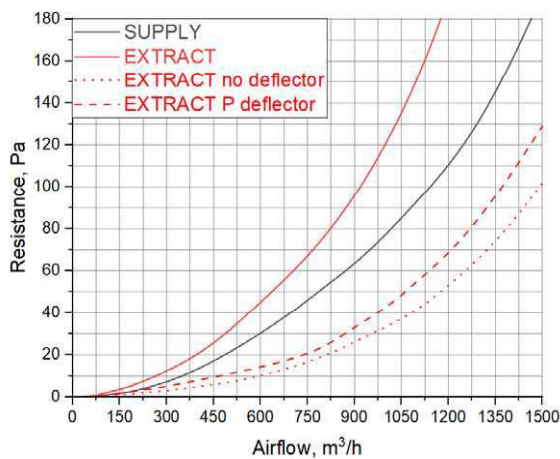
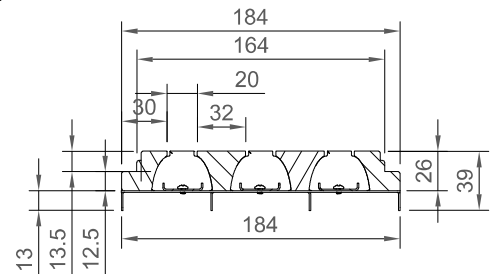
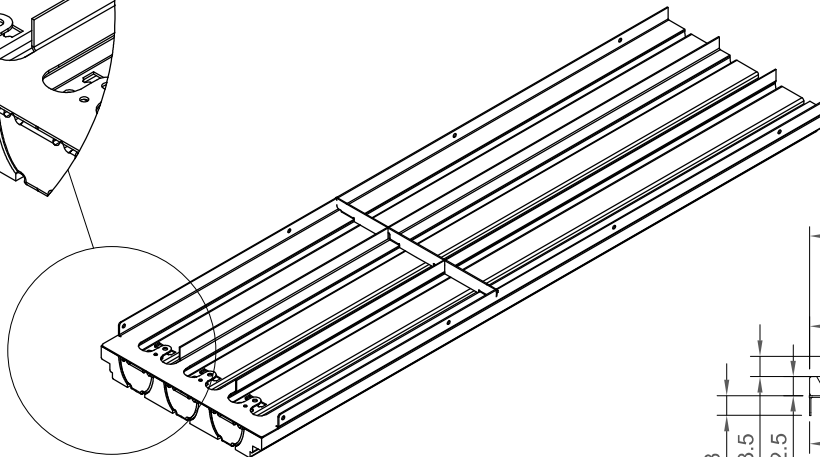
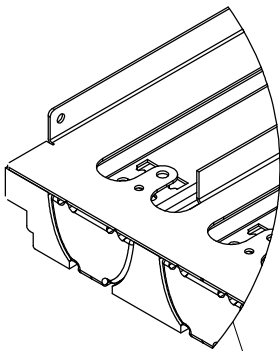
**5 kg**  
1 M. LENGTH DIFFUSER WEIGHT  
WITHOUT PACKAGING (NET)

**625 / 1000 / 1250**  
STANDARD SLOT LENGTH (MM)

**DEFLECTOR OPTIONS:**

Standart / Perforated  
/ No deflector

**C** **PLENUM BOX**  
**WIDTH TYPE**



**Note:** Data charts reflect measurements for the 1 m length model.

# PERFORMANCE LINE ACCESSORIES

## DEFLECTOR OPTIONS & AIR SUPPLY AFFECT



With Deflector

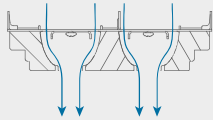


With perforated Deflector

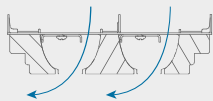


No Deflector

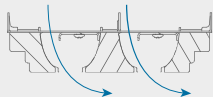
In center position



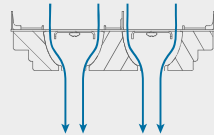
Deflector in left



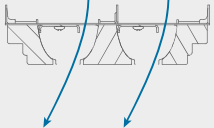
Deflector in right



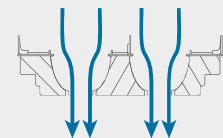
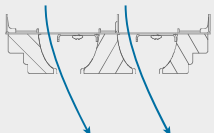
In center position



Deflector in left



Deflector in right



## PERFORMANCE LINE FLEXIBILITY

### CORRECT END CAP INSTALLATION

The indented arrow shows the correct side how the end cap should be inserted.

### WHEN INSTALLING ONE CONTINUOUS LINE

1. The end caps are not used.
2. Two diffusers are installed to each other with a small invisible gap which is then filled with plaster.
3. After plastering and sanding you have one continuous line.



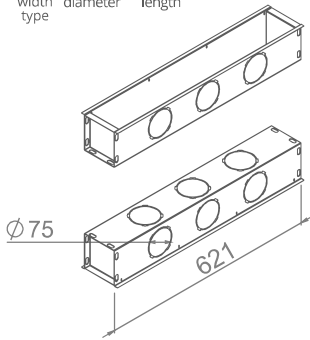
# PLENUM BOXES FOR LINE / PLINE DIFFUSERS



## GOOD TO GO

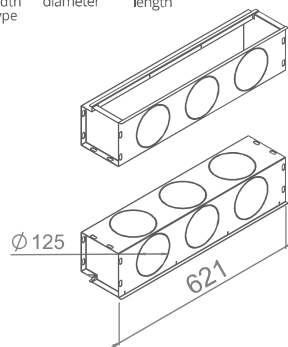
Order code:  
**GTG A 75 625**

Box width type Hole diameter Box length



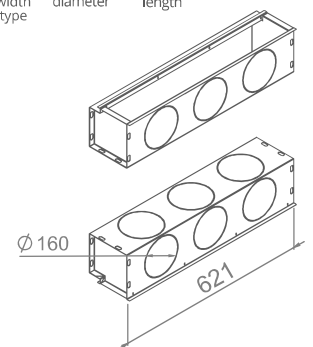
Order code:  
**GTG A 125 625**

Box width type Hole diameter Box length



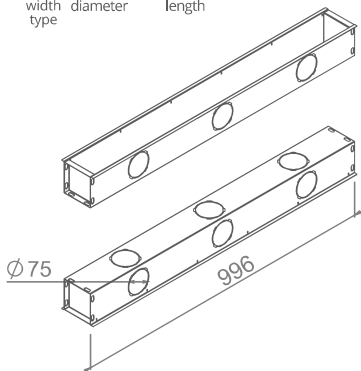
Order code:  
**GTG A 160 625**

Box width type Hole diameter Box length



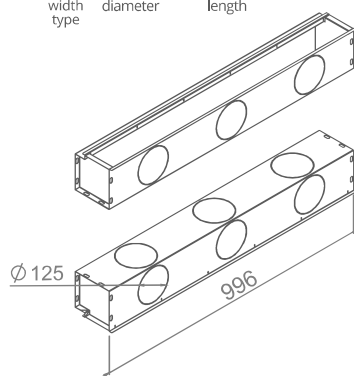
Order code:  
**GTG A 75 1000**

Box width type Hole diameter Box length



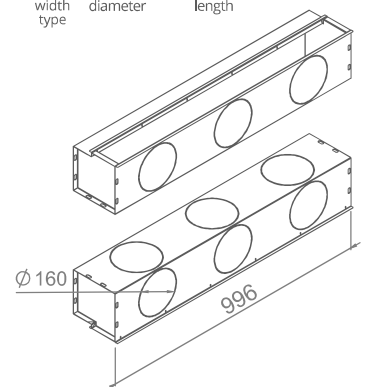
Order code:  
**GTG A 125 1000**

Box width type Hole diameter Box length



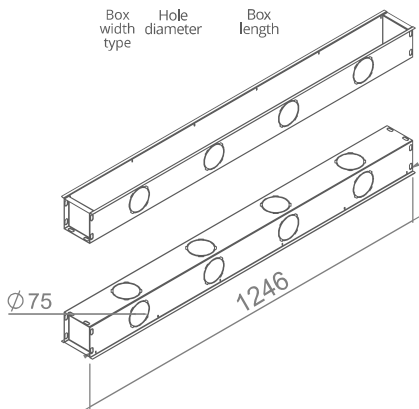
Order code:  
**GTG A 160 1000**

Box width type Hole diameter Box length



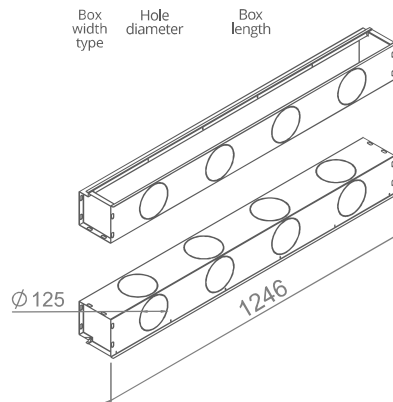
Order code:  
**GTG A 75 1250**

Box width type Hole diameter Box length



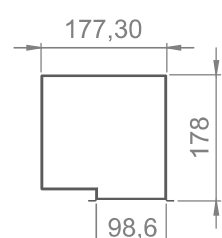
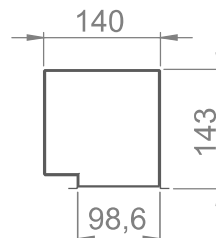
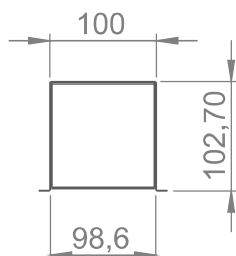
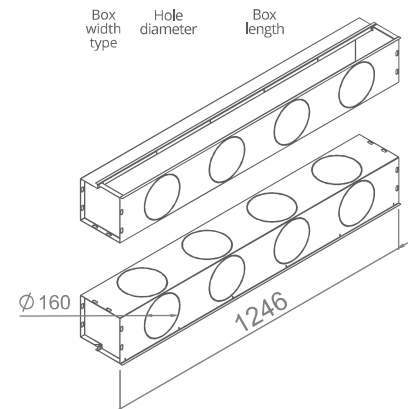
Order code:  
**GTG A 125 1250**

Box width type Hole diameter Box length



Order code:  
**GTG A 160 1250**

Box width type Hole diameter Box length

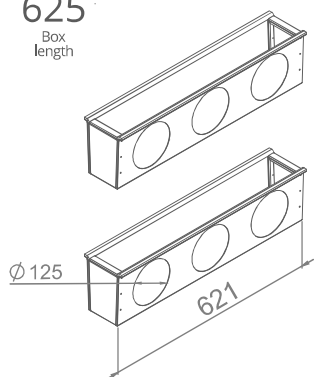


# SUITABLE FOR LINE AND LINE PERFORMANCE DIFFUSERS: 1/12, 1/18, 2/12, 2/18, 1/20 P

## "V" SHAPE INSULATED

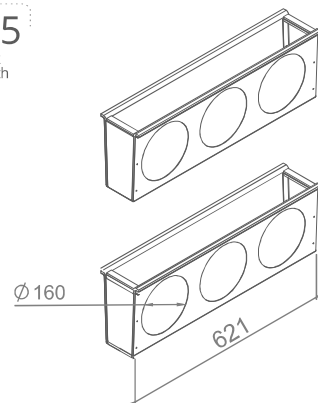
Order code:  
**VTBOX A 125 625**

Box width type  
Hole diameter  
Box length



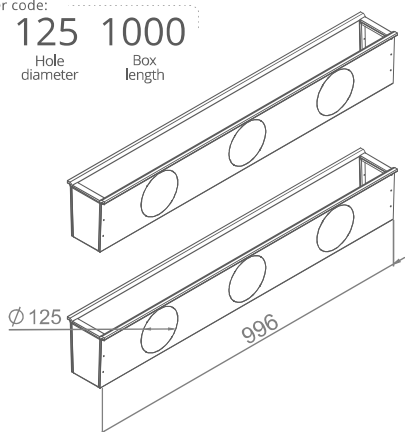
Order code:  
**VTBOX A 160 625**

Box width type  
Hole diameter  
Box length



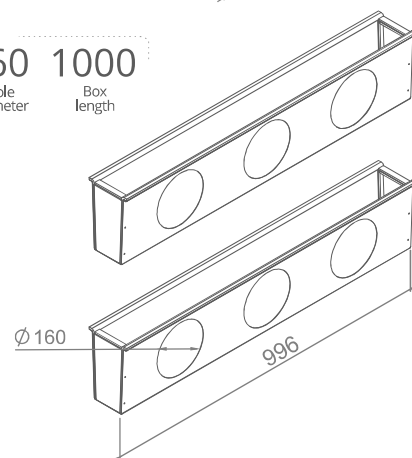
Order code:  
**VTBOX A 125 1000**

Box width type  
Hole diameter  
Box length



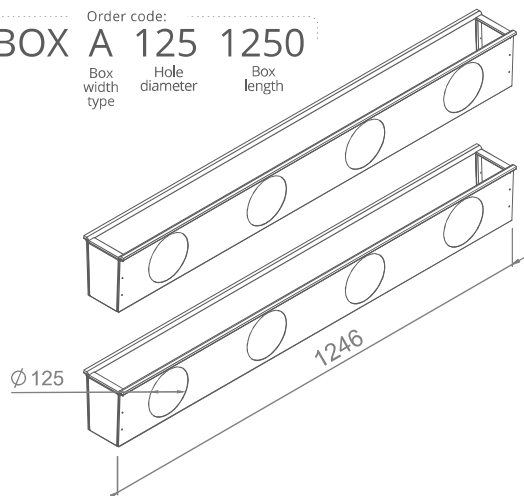
Order code:  
**VTBOX A 160 1000**

Box width type  
Hole diameter  
Box length



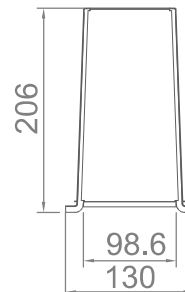
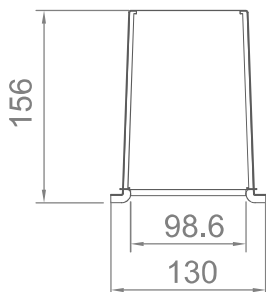
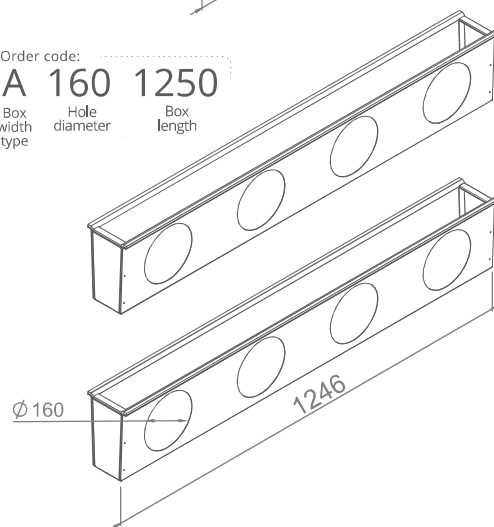
Order code:  
**VTBOX A 125 1250**

Box width type  
Hole diameter  
Box length



Order code:  
**VTBOX A 160 1250**

Box width type  
Hole diameter  
Box length

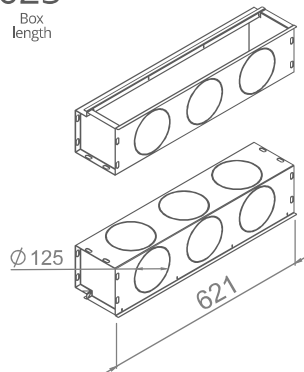


# PLENUM BOXES FOR LINE / PLINE DIFFUSERS

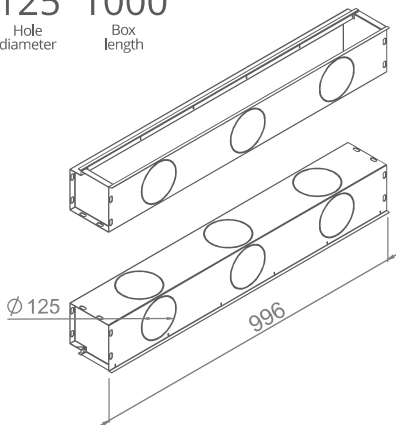
**B** PLENUM BOX WIDTH TYPE

**GOOD TO GO**

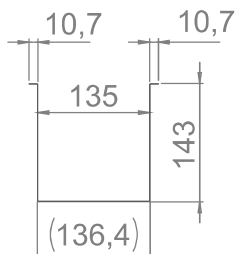
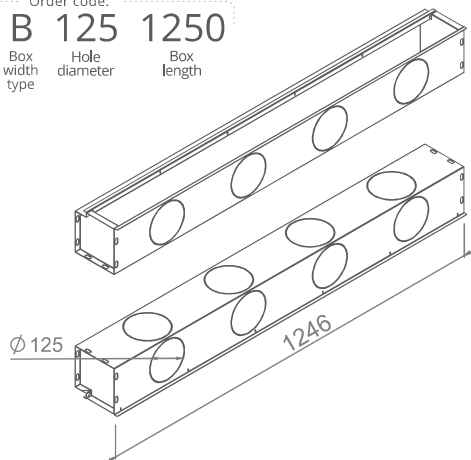
Order code:  
**GTG B 125 625**  
 Box width type    Hole diameter    Box length



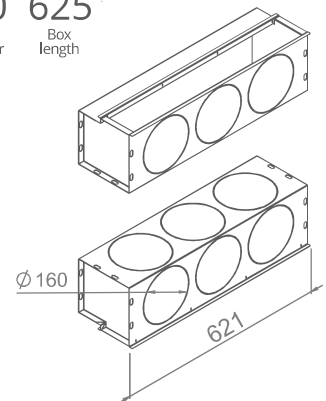
Order code:  
**GTG B 125 1000**  
 Box width type    Hole diameter    Box length



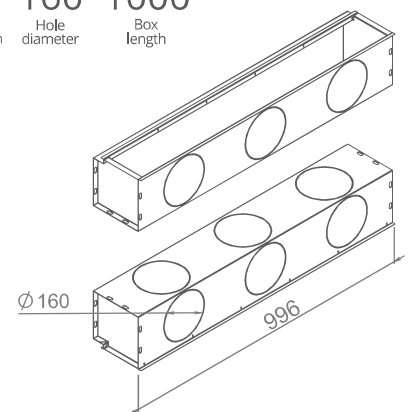
Order code:  
**GTG B 125 1250**  
 Box width type    Hole diameter    Box length



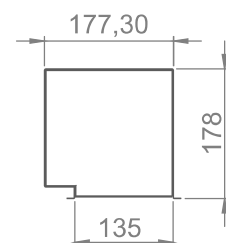
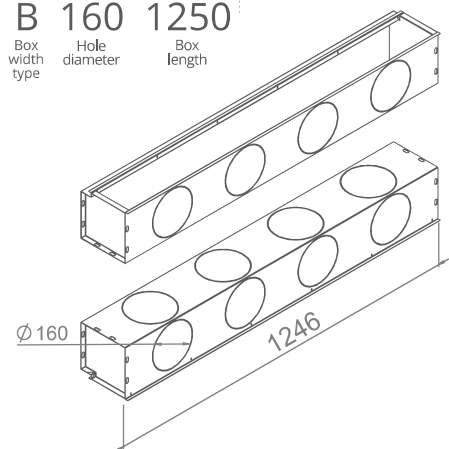
Order code:  
**GTG B 160 625**  
 Box width type    Hole diameter    Box length



Order code:  
**GTG B 160 1000**  
 Box width type    Hole diameter    Box length



Order code:  
**GTG B 160 1250**  
 Box width type    Hole diameter    Box length

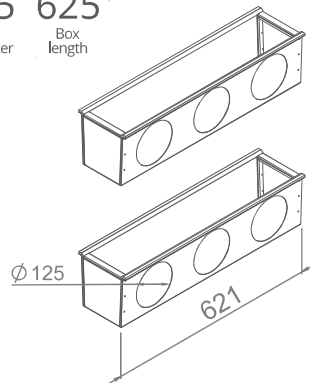


**SUITABLE FOR LINE AND LINE PERFORMANCE DIFFUSERS:  
3/12, 3/18, 2/20 P**

**"V" SHAPE INSULATED**

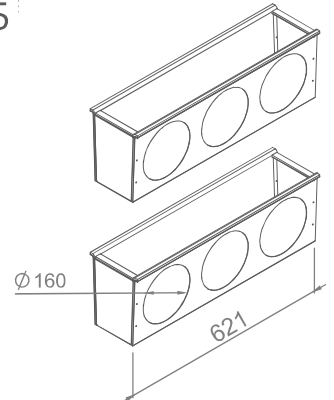
Order code:  
**VTBOX B 125 625**

Box width type  
Hole diameter  
Box length



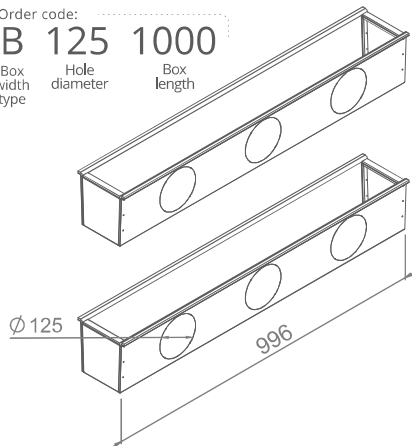
Order code:  
**VTBOX B 160 625**

Box width type  
Hole diameter  
Box length



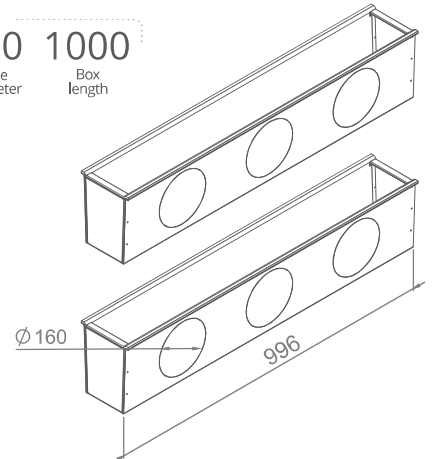
Order code:  
**VTBOX B 125 1000**

Box width type  
Hole diameter  
Box length



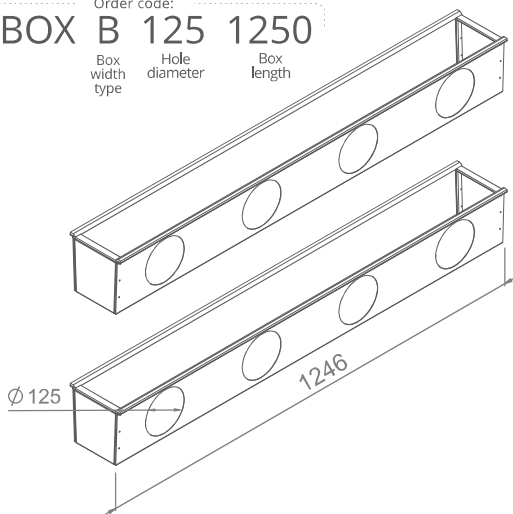
Order code:  
**VTBOX B 160 1000**

Box width type  
Hole diameter  
Box length



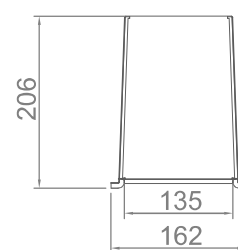
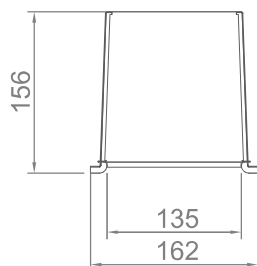
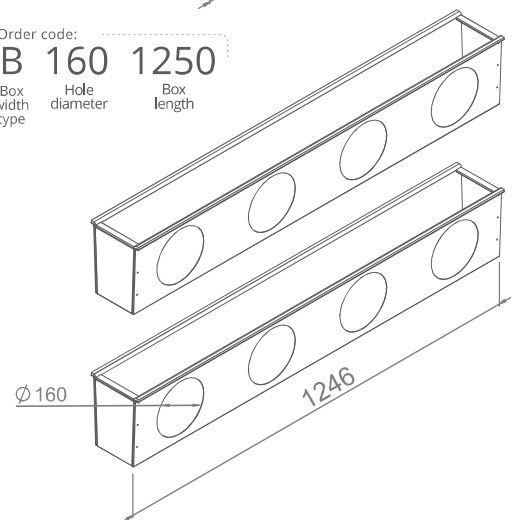
Order code:  
**VTBOX B 125 1250**

Box width type  
Hole diameter  
Box length



Order code:  
**VTBOX B 160 1250**

Box width type  
Hole diameter  
Box length



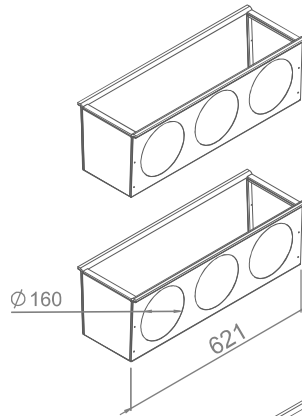
# PLENUM BOXES FOR LINE / PLINE DIFFUSERS

**C** PLENUM BOX  
WIDTH TYPE

## "V" SHAPE INSULATED

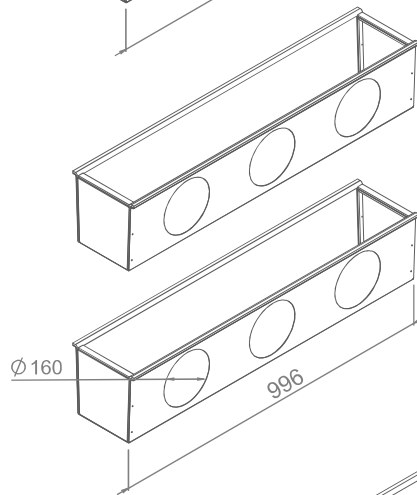
Order code:  
**VTBOX C 160 625**

Box width type    Hole diameter    Box length



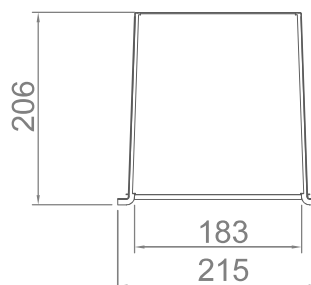
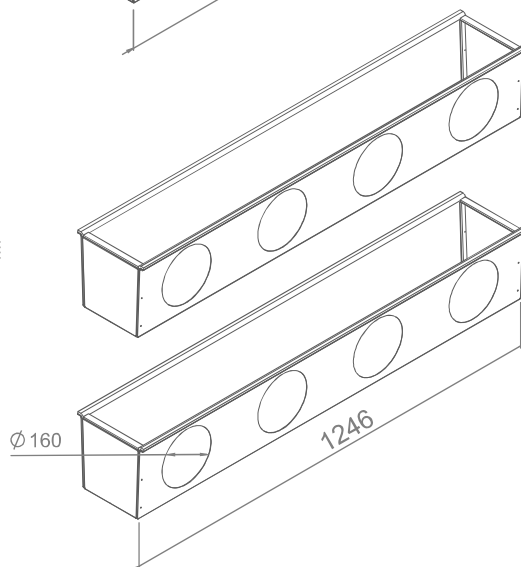
Order code:  
**VTBOX C 160 1000**

Box width type    Hole diameter    Box length



Order code:  
**VTBOX C 160 1250**

Box width type    Hole diameter    Box length

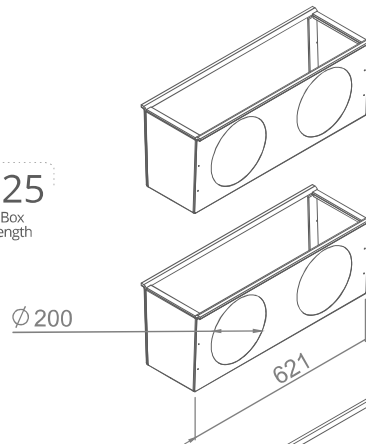




# SUITABLE FOR LINE AND LINE PERFORMANCE DIFFUSERS: 3/20 P

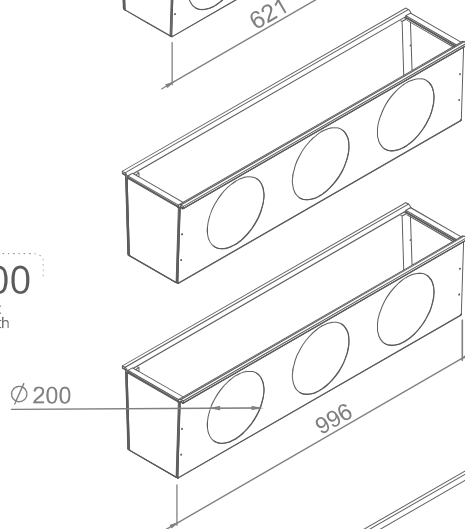
Order code:  
**VTBOX C 200 625**

Box width type    Hole diameter    Box length



Order code:  
**VTBOX C 200 1000**

Box width type    Hole diameter    Box length



Order code:  
**VTBOX C 200 1250**

Box width type    Hole diameter    Box length

